## **CLAIMS**

1. A method for estimating a bucket transition distribution for one or more bonds, comprising the steps of:

identifying a plurality of price buckets;

calculating bucket transition probabilities for a first bond; and

estimating a bucket transition distribution for the first bond using the calculated bucket transition probabilities.

- 2. The method of Claim 1, wherein one of the buckets corresponds to an exit state, and wherein the estimating step includes estimating bucket transitions based on the bucket transition probabilities until the exit state or a maturity date of the first bond is reached, thereby completing a first simulation.
- 3. The method of Claim 2, wherein the exit state is one of a default and a call.
- 4. The method of Claim 1, wherein the estimating includes determining the probability that the first bond is in a particular bucket at a particular time.
- 5. The method of Claim 4, wherein one of the buckets corresponds to a default state and the estimating includes determining a default rate for a particular time period for the first bond.
- 6. The method of Claim 5, wherein the estimating includes determining a cumulative default rate for a number of time periods by summing default balances for each of the number of time periods and dividing the sum by an average balance for a first of the number of time periods.

- 7. The method of Claim 2, further including multiple simulations.
- 8. The method of Claim 2, further including

calculating bucket transition probabilities for a second bond;
estimating a bucket transition distribution for the second bond using the
calculated bucket transition probabilities; and

grouping the estimated bucket transition distributions for the bonds, thereby enabling an evaluation of the credit risk of the bonds.

9. A system for estimating a bucket transition distribution for one or more bonds, comprising:

means for identifying a plurality of price buckets;

means for calculating bucket transition probabilities for a first bond; and

means for estimating a bucket transition distribution for the first bond using the

calculated bucket transition probabilities.

- 10. The system of Claim 10, further including means for estimating bucket transitions based on the bucket transition probabilities until an exit state, corresponding to one of the buckets, or a maturity date of the first bond is reached, thereby completing a first simulation.
- 11. The system of Claim 10, wherein the exit state is one of a default and a call.
- 12. The system of Claim 9, wherein the means for estimating includes a means for determining the probability that the first bond is in a particular bucket at a particular time.

- 13. The system of Claim 12, wherein the means for estimating includes a means for determining a default rate for a particular time period for the first bond.
- 14. The system of Claim 13, wherein the estimating means includes a means for determining a cumulative default rate for a number of time periods by summing default balances for each of the number of time periods and dividing the sum by an average balance for a first of the number of time periods.
- 15. The system of Claim 9, further including multiple simulations.
- 16. The system of Claim 9 for estimating bucket transition distribution for one or more bonds, further comprising:

means for calculating bucket transition probabilities for a second bond;

means for estimating a bucket transition distribution for the second bond using the calculated bucket transition probabilities; and

means for grouping the estimated bucket transition distributions for the bonds, thereby enabling an evaluation of the credit risk of the bonds.

17. A computer readable medium for estimating bucket transition distribution for one or more bonds, the medium comprising a program that causes a processor to implement the steps of:

identifying a plurality of price buckets; calculating bucket transition probabilities for a first bond; and

estimating a bucket transition distribution for the first bond using the calculated bucket transition probabilities.

- 18. The computer readable medium of Claim 15, wherein one of the buckets corresponds to an exit state, and wherein the estimating step includes estimating bucket transitions based on the bucket transition probabilities until the exit state or a maturity date of the first bond is reached, thereby completing a first trial.
- 19. The computer readable medium of Claim 16, wherein the exit state is one of a default and a call.
- 20. The computer readable medium of Claim 17, wherein the estimating includes determining the probability that the first bond is in a particular bucket at a particular time.
- 21. The computer readable medium of Claim 18, wherein one of the buckets corresponds to a default state and the estimating includes determining a default rate for a particular time period for the first bond.
- 22. The computer readable medium of Claim 19, wherein the estimating includes determining a cumulative default rate for a number of time periods by summing default balances for each of the number of time periods and dividing the sum by an average balance for a first of the number of time periods.
- 23. The computer readable medium of Claim 16, further including multiple trials.
- 24. The computer readable medium of Claim 16, further including

calculating bucket transition probabilities for a second bond;
estimating a bucket transition distribution for the second bond using the
calculated bucket transition probabilities; and

grouping the estimated bucket transition distributions for the bonds, thereby enabling an evaluation of the credit risk of the bonds.

25. A device for estimating a bucket transition distribution for one or more bonds, comprising a processor configured to:

identify a plurality of price buckets;

calculate bucket transition probabilities for a first bond; and

estimate a bucket transition distribution for the first bond using the calculated bucket transition probabilities.

- 26. The device of Claim 25, wherein one of the buckets corresponds to an exit state, and wherein the processor is configured to estimate bucket transitions based on the bucket transition probabilities until the exit state or a maturity date of the first bond is reached, thereby completing a first simulation.
- 27. The device of Claim 26, wherein the exit state is one of a default and a call.
- 28. The device of Claim 27, wherein the processor is configured to determine the probability that the first bond is in a particular bucket at a particular time.
- 29. The device of Claim 28, wherein one of the buckets corresponds to a default state and the processor is configured to determine a default rate for a particular time period for the first bond.

- 30. The device of Claim 29, wherein the processor is configured to determine a cumulative default rate for a number of time periods by summing default balances for each of the number of time periods and dividing the sum by an average balance for a first of the number of time periods.
- 31. The device of Claim 26, further including multiple simulations.
- 32. The device of Claim 26, wherein the processor is further configured to

calculate bucket transition probabilities for a second bond;
estimate a bucket transition distribution for the second bond using the calculated bucket transition probabilities; and

group the estimated bucket transition distributions for the bonds, thereby enabling an evaluation of the credit risk of the bonds.